UOP PATENT DPT. CENTRAL FAX CENTER

Appl. No 10/725,887 Reply to Office action of 01/12/2007

JUN 13 2007

Page 2

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1. (Currently Amended) A heat treatment system, comprising:
 - (a) a plurality of feed lines for feeding a fluid;
 - (b) a plurality of treatment zones, each treatment zone being fed by one of the plurality of feed lines:
 - (c) wherein each treatment zone includes at least one chamber for holding a material and flowing the fluid through the material;
 - (d) a plurality of heating elements, wherein each heating element heats the material in a corresponding single chamber [[one]] of the plurality of chambers; and
 - (e) a plurality of effluent conduits conducting fluid from the treatment zone, wherein each effluent conduit is equipped with a device selected from the group consisting of a sensing device, a detection device, a sampling device, or a combination thereof.
- 2. (Original) A heat treatment system according to claim 1, wherein there are six treatment zones.
- 3. (Original) A heat treatment system according to claim 1, wherein there are eight chambers for each treatment zone.
- 4. (Original) A heat treatment system according to claim 1, wherein each feed line further comprises a control valve for controlling flow rate of the fluid.
- 5. (Original) A heat treatment system according to claim 1, further comprising a diluent line for each feed line for feeding a diluent fluid to each feed line.
- 6. (Original) A heat treatment system according to claim 5, further comprising a mixing zone for mixing the diluent fluid from the diluent line with the fluid from the feed line.
- 7. (Original) A heat treatment system according to claim 1, further comprising a liquid line for each feed line for feeding a liquid to each feed line.

2004

Appl. No 10/725,887 Reply to Office action of 01/12/2007

Page 3

8. (Original) A heat treatment system according to claim 7, further comprising a means for mixing the liquid from the liquid line with the fluid from the feed line.

UOP PATENT DPT.

- 9. (Original) A heat treatment system according to claim 1 further comprising a common effluent line that communicates with all of the effluent conduits to collect all of the fluid from the effluent conduits, said common effluent line located downstream of the device.
- 10. (Original)A heat treatment system according to claim 1, further comprising a heated enclosure for heating the materials in the chambers, wherein the treatment zones are enclosed by the heated enclosure.
- 11. 21. (Cancelled)